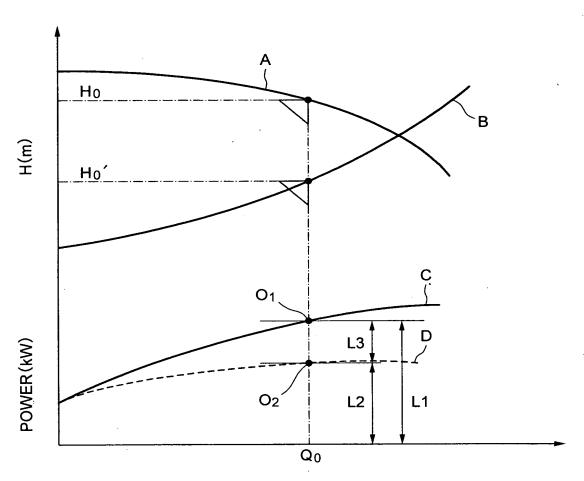


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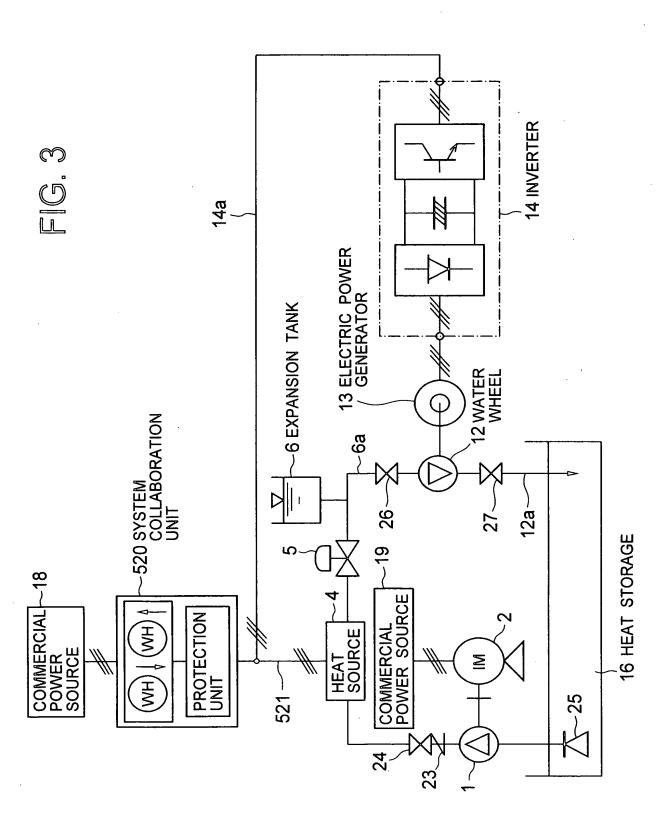
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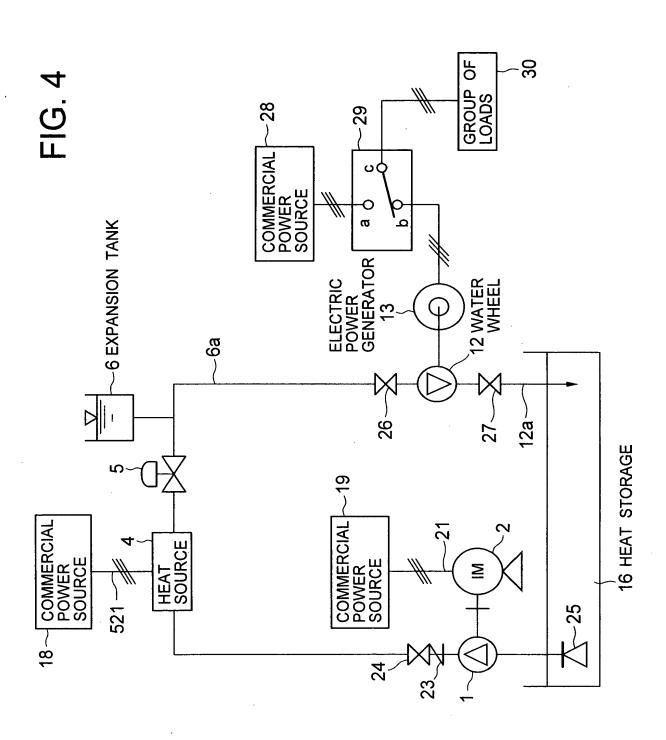
FIG. 2

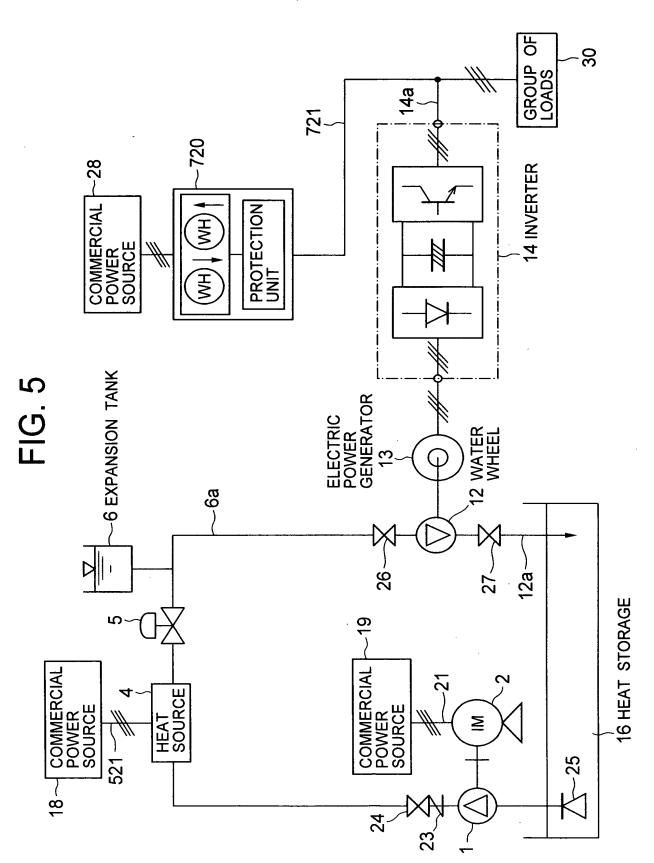


FLOW RATE Q(m3/min)

L3/L1=40~60%

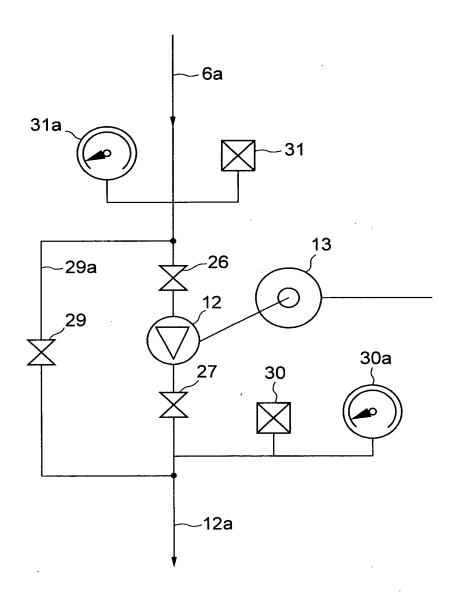






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FIG. 6



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### FIG. 7

### <TO START OPERATION>

1.	OPEN WATERWHEEL INLET VALVE, CLOSE WATERWHEEL OUTLET VALVE, AND CLOSE WATERWHEEL BYPASS VALVE
2.	POWER HEAT SOURCE
ļ	
3.	POWER MOTOR TO DRIVE PRIMARY COOL/WARM PUMP
4.	TRANSMIT REQUEST SIGNAL FROM HEAT SOURCE SIDE TO OPERATE PRIMARY COOL/WARM PUMP
5.	RECEIVE OPERATION REQUEST SIGNAL, OPERATE MOTOR TO DRIVE PRIMARY COOLWARM PUMP, AND TRANSMIT OPERATION ANSWER SIGNAL TO HEAT SOURCE
6.	OPERATE HEAT SOURCE WHEN PREDETERMINED PERIOD OF TIME LAPSES AFTER OPERATION ANSWER SIGNAL IS RECEIVED
7.	WHEN PREDETERMINED PERIOD OF TIME LAPSES AFTER HEAT SOURCE IS OPERATED, CLOSE WATERWHEEL OUTLET VALVE AND OPERATE WATERWHEEL. OPERATE ELECTRIC POWER
	GENERATOR
8.	SUPPLY GENERATED ELECTRIC POWER VIA INVERTER TO MOTOR TO DRIVE PRIMARY COOLWARM PUMP
<то	STOP OPERATION>
9.	CLOSE WATERWHEEL OUTLET VALVE AND STOP WATERWHEEL. STOP ELECTRIC POWER GENERATOR
10.	STOP SUPPLYING GENERATED POWER, STOP INVERTER, STOP SUPPLYING POWER TO MOTOR TO DRIVE PRIMARY COOL/WARM PUMP
11.	TRANSMIT STOP REQUEST SIGNAL FROM HEAT SOURCE SIDE TO PRIMARY COOL/WARM PUMP SIDE. STOP HEAT SOURCE
12.	RECEIVE STOP REQUEST SIGNAL TO STOP MOTOR TO DRIVE PRIMARY COOL/WARM PUMP, STOP PRIMARY COOL/WARM PUMP, AND RETURN STOP ANSWER SIGNAL TO HEAT SOURCE

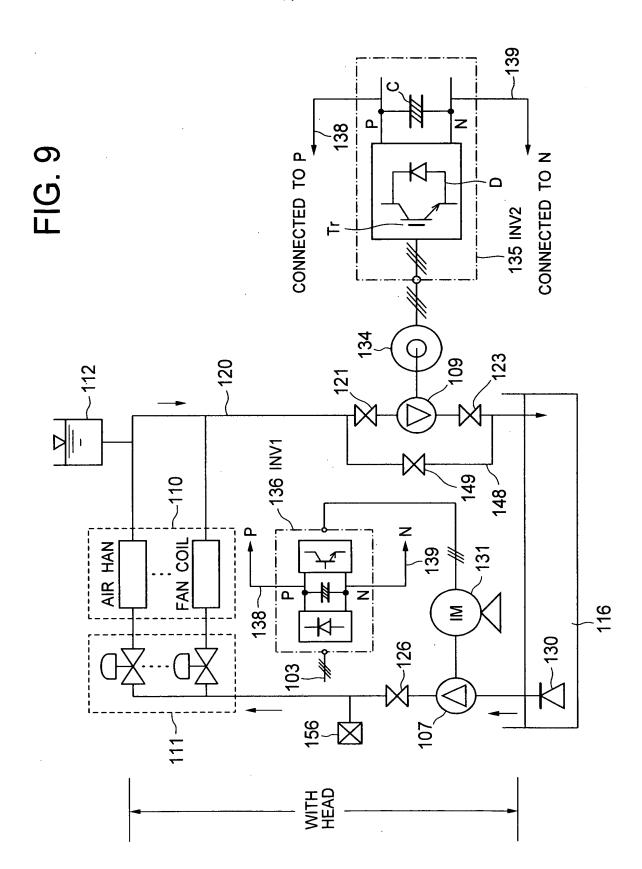
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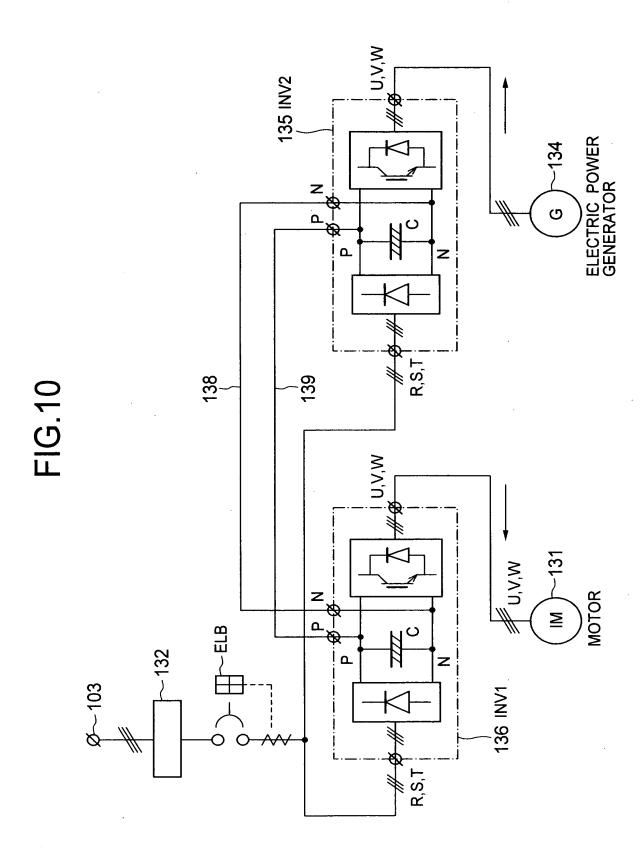
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# FIG. 8

#### <TO START OPERATION>

CLOSE WATERWHEEL BYPASS VALVE
POWER HEAT SOURCE
POWER MOTOR TO DRIVE PRIMARY COOL/WARM PUMP
TRANSMIT REQUEST SIGNAL FROM HEAT SOURCE SIDE TO OPERATE PRIMARY COOL/WARM PUMP
RECEIVE OPERATION REQUEST SIGNAL, OPERATE MOTOR TO DRIVE PRIMARY COOLWARM PUMP, AND TRANSMIT OPERATION ANSWER SIGNAL TO HEAT SOURCE
OPERATE HEAT SOURCE WHEN PREDETERMINED PERIOD OF TIME LAPSES AFTER OPERATION ANSWER SIGNAL IS RECEIVED
WHEN PRESSURE AT WATERWHEEL INLET REACHES PREDETERMINED PRESSURE, AUTOMATIC VALVES IN OUTLET AND THE INLET OF THE WATERWHEEL OPEN, AND WATERWHEEL AND ELECTRIC POWER GENERATOR OPERATE
SUPPLY GENERATED ELECTRIC POWER VIA INVERTER TO MOTOR TO DRIVE PRIMARY COOL/WARM PUMP
STOP OPERATION>
CLOSE AUTOMATIC OUTLET AND INLET VALVES OF WATERWHEEL, STOP THE WATERWHEEL, AND STOP ELECTRIC POWER GENERATOR
STOP SUPPLYING GENERATED POWER, STOP INVERTER, STOP SUPPLYING POWER TO MOTOR TO DRIVE PRIMARY COOL/WARM PUMP
STOP HEAT SOURCE AND TRANSMIT STOP REQUEST SIGNAL FROM HEAT SOURCE SIDE TO PRIMARY COOLWARM PUMP
RECEIVE STOP REQUEST SIGNAL TO STOP MOTOR TO DRIVE PRIMARY COOL/WARM PUMP, STOP PRIMARY COOL/WARM PUMP, AND RETURN STOP ANSWER SIGNAL TO HEAT SOURCE

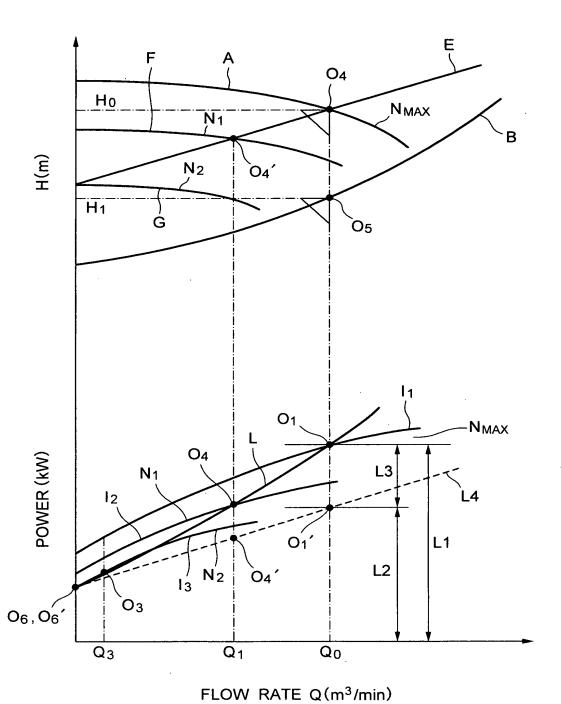




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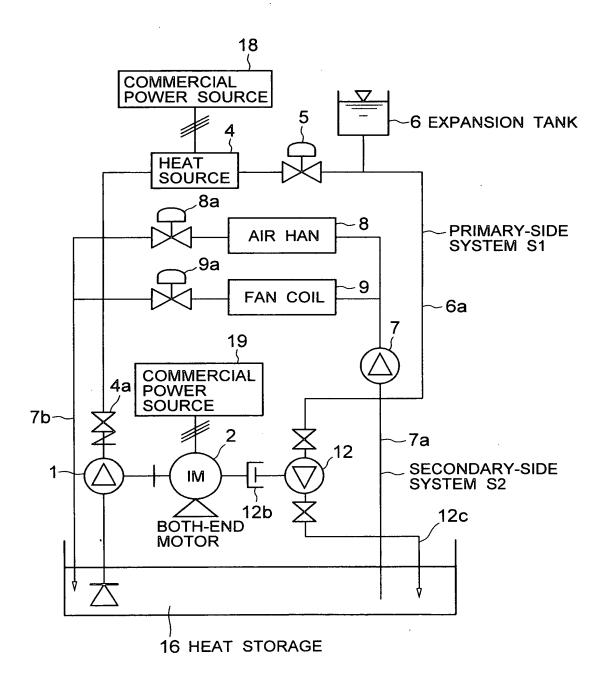
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# FIG. 11



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FIG. 12



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FIG. 13

